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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,458	10/24/2005	Masahiko Kadokura	38852	9033
53054 7590 08/31/2009 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER CATTUNGA, SANJAY				
ART UNIT		PAPER NUMBER		
3768				
NOTIFICATION DATE		DELIVERY MODE		
08/31/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/554,458

Applicant(s)

KADOKURA, MASAHIKO

Examiner

SANJAY CATTUNGAL

Art Unit

3768

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date 05/20/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 05/20/2009 have been fully considered but they are not persuasive. Applicant argues that in Taylor the first pulley is not attached to the shaft rather to the bevel gear, which is attached the shaft. Examiner agrees with the applicant that the First pulley is attached to the shaft via the bevel gear, but would like to point out that the claims state "a first pulley attached to a tip of said rotation shift" it does not state that its directly connected as such in the Taylor reference the First pulley is connected to the shaft.
2. Applicant argues that the Morley reference is non-analogous art as it is an invasive cauterizing and cutting tool for use with robotic surgical system. Examiner would like to point out that Morley reference was only used to teach the use cables with pulleys. Morley reference is in the biomedical art and as such is relevant and pertinent as it solves the problem of orientation of a probe using pulleys.
3. Applicant argues that the sliding mechanism of Bluementhal does not specifically state that it will make sure that the wire is not loosened. Examiner would like to point out that the Bluementhal reference has the same sliding mechanism for the pulley as taught by the applicant and hence it is inherently capable of performing that functional limitation.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,709,397 to Taylor in view of U. S. Patent No. 6,840,938 to Morley et al. further in view of U. S. Patent No. 5,048,529 to Blumental.

6. Regarding Claims 1, 2, and 5, Taylor teaches an ultrasonic probe, comprising an inserting portion to be inserted into a body cavity (Fig. 2); and a grip portion held by an operator outside of the body cavity (Fig. 2), wherein the inserting portion includes a transducer unit for transmitting and receiving an ultrasonic wave (Fig. 8 elements 31-33), a rotation axis provided in the transducer unit, and a swing mechanism for swinging the transducer unit around the rotation axis as a center axis (Abstract and Fig. 8), and the grip portion includes a motor for driving the swing mechanism (Fig. 2 element 2 and 5), the swing mechanism includes a shaft connected to the motor (Fig. 2 element 13), a first pulley provided at an end portion of the shaft different from an end portion connected to the motor (Fig. 2 element 8), a second pulley coaxially provided at the rotation axis (Fig. 2 element 9), and a belt connecting the first pulley and the second pulley, and rotational movement of the motor is transmitted to the transducer unit via the shaft, the first pulley, the belt, and the second pulley (Abstract, Figs. 1, 2 and 8).
7. Taylor does not expressly teach the use of a wire to engage the pulleys.

8. Morley teaches the use of cables to engage the pulleys (Fig. 4b).
9. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Taylor with a setup to use cables to engage the pulley as taught by Morley, since the use of cables/wires/belts with pulleys is well known in the art as they are obvious variants of each other.
10. Taylor and Morley do not expressly teach the use of a sliding mechanism for sliding the middle pulley. Taylor teaches a sliding mechanism for sliding the transducer (Fig 1 element 16).
11. Blumenthal teaches the use of a sliding mechanism to slide the pulleys to change the angle of the transducer (Fig. 1 element 34).
12. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Taylor and Morley to use a sliding mechanism to move the pulley as taught by Blumental, since such a setup would help in changing the angle of motion of the transducer.
13. Regarding Claim 3, Morley teaches that the cable is attached to the block which is attached to the pulley (Fig. 12b).
14. Regarding Claim 4, Taylor teaches that the wire is confined in the tip portion (Figs. 1, 2, and 8).

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SANJAY CATTUNGAL whose telephone number is (571)272-1306. The examiner can normally be reached on Monday-Friday 9-5.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPC

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768